REDACTED CLAIMS

- 1. (Amended) A method for managing compiler error messages, comprising the steps of:

 displaying a compiler error message having a separate empty error file to a user;

 accepting from said user an annotation to said compiler error message;

 associating said annotation with said compiler error message using a unique key and storing said annotation in said separate empty error file; and thereafter selectively displaying said annotation with said compiler error message.
- 2. (Amended) The method of claim 1, said selectively displaying step further comprising the steps of:
 displaying with said <u>compiler error</u> message indicia representing the existence of said annotation;
 selectively receiving from said user a request to display said annotation; and displaying said annotation with said <u>compiler error</u> message.
- 3. (Amended) The method of claim 1, said accepting step further comprising the steps of: selectively presenting to said user an edit panel; and receiving from said user said annotation input associated with said compiler error message to said edit panel.
- 4. (Amended) The method of claim 1, further comprising the steps of:

 selecting a <u>compiler error</u> message <u>having a first key</u> from a first file of <u>compiler error</u>

 messages for display to said user; and

Page 2 of 14 Docket No. CA9-98-0006

associating in a second file said annotation to [a corresponding] said selected compiler error using a second key message in said first file.

- 5. (Amended) The method of claim 4, further comprising the steps of: providing <u>compiler error</u> message identifying indicia for each <u>compiler error</u> message in said first file; generating annotation identifying indicia as a function of said <u>compiler error</u> message identifying indicia.
- 6. (Amended) The method of claim 4, further comprising the steps of:

upon presenting a <u>compiler error</u> message from said first file, determining the presence of a corresponding annotation in said second file <u>using said second key</u>;

responsive to the presence of said corresponding annotation,
displaying with said <u>compiler error</u> message indicia representing the existence of said
annotation;

selectively receiving from said user a request to display said annotation; and

responsive to receiving the request from said user, displaying said annotation with said compiler error message using said second key.

7. (Amended) The method of claim 1, further comprising the steps of:

Page 3 of 14 Docket No. CA9-98-0006 during processing of application code entered by a user, identifying [an] a compiler error in said code;

selecting and presenting to said user [an] <u>a compiler</u> error message [corresponding to said error];

identifying and presenting to said user an annotation corresponding to said <u>compiler</u> error message; and

enabling and selectively receiving [an] said annotation and a modified annotation from said user for association with said compiler error message.

- 8. (Amended) The method of claim 7, further comprising the steps of:

 preserving a history of <u>compiler</u> error messages presented to said user;

 enabling user selection <u>for one</u> of [an] <u>said compiler</u> error messages from said history of <u>compiler</u> error messages; and

 selectively receiving from said user an annotation to the <u>compiler</u> error message selected from said history.
- (Amended) The method of claim 1, further comprising the step of presenting said annotation to other users receiving said <u>compiler error</u> message.
- 10. (Amended) The method of claim 4, further comprising the step of enabling access by other users to said second <u>file containing said annotations associated with said compiler</u> <u>error messages</u>.

Page 4 of 14 Docket No. CA9-98-0006 11. (Amended) A method for managing <u>compiler</u> error messages in a graphic user interface, comprising the steps of:

selecting and displaying [an] a compiler error message having a separate empty error file to a user;

accepting from said user an annotation to said compiler error message;

associating said annotation with said <u>compiler error</u> message <u>and storing said annotation</u> in said separate empty error file using a <u>unique key</u>;

thereafter selectively displaying said annotation with said <u>compiler error</u> message; and presenting an edit panel in said graphic user interface for user entry of new or modified annotations.

12. (Amended) A system for managing <u>compiler error</u> messages at a user interface, comprising:

means for displaying a <u>compiler error</u> message <u>having a separate empty error file</u> to a user:

means for accepting from said user an annotation to said <u>compiler error</u> message;

means for associating said annotation with said <u>compiler error</u> message <u>and storing said</u>

<u>annotation in said separate empty error file using a unique key;</u> and

means for selectively displaying said annotation with said <u>compiler error</u> message.

13. (Amended) A system for presenting compiler error messages in a user display, comprising:

Page 5 of 14 Docket No. CA9-98-0006 a first file for storing a plurality of <u>compiler error</u> messages, each said <u>compiler error</u> message identified by a message key;

a second file for storing a plurality of annotations, each said annotation associated with a corresponding one of said compiler error messages;

a first event driven control component for selecting from said first file and displaying a [display] compiler error message from said first file [for presentation] in said user display;

a second event driven control component for determining the presence in said second file of an annotation associated with said displayed compiler error message; and a third event driven control component for displaying using a unique key said associated annotation in said user display.

- 14. (Amended) The system of claim 13, further comprising a fourth control component responsive to entry in said user display of a [message] annotation to a displayed compiler error message, for adding said [message] annotation to said second file using a unique key associated with said displayed compiler error message.
- 15. (Amended) The system of claim 14, further comprising an editor for receiving via an annotation panel in said user display said [message] annotation
- 16. (Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform the method steps for managing compiler error messages of claim 1.

Page 6 of 14 Docket No. CA9-98-0006

- 17. (Amended) A computer program product or computer program element for managing a compiler error message display according to claim 1.
- 18. (Amended) An article of manufacture comprising:

 a computer useable medium having computer readable program code means embodied therein for managing compiler error messages, the computer readable program means in said article of manufacture comprising:

 computer readable program code means for causing a computer to effect displaying a compiler error message to a user having a separate empty error file;

 computer readable program code means for causing a computer to effect accepting from said user an annotation to said compiler error message;

 computer readable program code means for causing a computer to effect associating said annotation with said compiler error message and storing said annotation in said separate empty error file using a unique key; and computer readable program code means for causing a computer to effect thereafter
- 19. (Amended) The article of manufacture of claim 18, said computer readable program code means for causing a computer to effect selectively displaying further comprising: computer readable program code means for causing a computer to effect displaying with said compiler error message indicia representing the existence of said annotation;

selectively displaying said annotation with said compiler error message.

Page 7 of 14 Docket No. CA9-98-0006

computer readable program code means for causing a computer to effect selectively receiving from said user a request to display said annotation using a unique key; and computer readable program code means for causing a computer to effect displaying said annotation with said compiler error message.

- (Amended) The article of manufacture of claim 18, said computer readable program 20. code means for causing a computer to effect accepting further comprising: computer readable program code means for causing a computer to effect selectively presenting to said user an edit panel; and computer readable program code means for causing a computer to effect receiving from said user said annotation input to said edit panel associated with one of said compiler error messages.
- (Amended) The article of manufacture of claim 18, further comprising: 21. computer readable program code means for causing a computer to effect selecting a compiler error message from a first file of compiler error messages for display to said user; and computer readable program code means for causing a computer to effect associating in a second file said annotation to a corresponding compiler error message in said first file.
- 22. (Amended) The article of manufacture of claim 21, further comprising:

Page 8 of 14 Docket No. CA9-98-0006

computer readable program code means for causing a computer to effect providing compiler error message identifying indicia for each compiler error message in said first file:

computer readable program code means for causing a computer to effect generating annotation identifying indicia as a function of said <u>compiler error</u> message identifying indicia.

23. (Amended) The article of manufacture of claim 21 [or claim 22], further comprising: computer readable program code means for causing a computer to effect, upon presenting a compiler error message from said first file, determining the presence of a corresponding annotation in said second file; computer readable program code means for causing a computer to effect, responsive to the presence of said corresponding annotation, displaying with said compiler error message indicia representing the existence of said annotation; computer readable program code means for causing a computer to effect selectively receiving from said user a request to display said annotation; and computer readable program code means for causing a computer to effect responsive to

receiving the request from said user, displaying said annotation with said compiler error

24. (Amended) The article of manufacture of claim 18, further comprising:

Page 9 of 14 Docket No. CA9-98-0006

message.

computer readable program code means for causing a computer to effect, during processing of application code by a compiler entered by a user, identifying [an] a compiler error in said code; computer readable program code means for causing a computer to effect, selecting and presenting to said user [an] a compiler error message corresponding to said error; computer readable program code means for causing a computer to effect identifying and presenting to said user an annotation corresponding to said compiler error message; and computer readable program code means for causing a computer to effect enabling and selectively receiving [an] said annotation and a modified annotation from said user for association with said compiler error message.

25. (Amended) The article of manufacture of claim 24, further comprising:

computer readable program code means for causing a computer to effect preserving a history of compiler error messages presented to said user;

computer readable program code means for causing a computer to effect enabling user selection of one of said compiler [an] error messages from said history of compiler error messages; and

computer readable program code means for causing a computer to effect selectively receiving from said user an annotation to the compiler error message selected from said history.

Page 10 of 14 Docket No. CA9-98-0006

- 26. (Amended) The article of manufacture of <u>claim</u> 18, further comprising computer readable program code means for causing a computer to effect presenting said annotation to other users receiving said <u>compiler error</u> message.
 - 27. (Amended) The article of manufacture of claim 21, further comprising computer readable program code means for causing a computer to effect enabling access by other users to said second file containing said annotation associated with said compiler error file.
- 28. (Amended) An article of manufacture comprising:

a computer useable medium having computer readable program code means embodied therein for managing compiler error messages in a graphic user interface, the computer readable program means in said article of manufacture comprising:

computer readable program code means for causing a computer to effect selecting and displaying [an] a compiler error message having a separate empty error file to a user; computer readable program code means for causing a computer to effect accepting from

said user an annotation to said compiler error message;

computer readable program code means for causing a computer to effect associating said annotation with said compiler error message and storing said annotation in said separate empty error file using a unique key;

computer readable program code means for causing a computer to effect thereafter selectively displaying said annotation with said <u>compiler error</u> message; and

Page 11 of 14 Docket No. CA9-98-0006

.

computer readable program code means for causing a computer to effect presenting an edit panel in said graphic user interface for user entry of new or modified annotations.

- 29. (Amended) A computer program product for presenting compiler error messages in a user display, comprising:
 - a first file for storing a plurality of <u>compiler error</u> messages, each said <u>compiler error</u> message identified by a message key;
 - a second file for storing a plurality of annotations, each said annotation associated with a corresponding one of said compiler error messages;
 - a first event driven control component for selecting from said first file a [display] compiler error message [from said first file] for presentation in said user display;
 - a second event driven control component for determining the presence in said second file of an annotation associated with said [display] compiler error message; and
 - a third event driven control component for displaying said associated annotation in said user display.
 - 30. (Amended) The computer program product of claim 29, further comprising a fourth control component responsive to entry in said user display of a [message] annotation to a displayed compiler error message, for adding said [message] annotation to said second file associated with said displayed compiler error message.

Page 12 of 14 Docket No. CA9-98-0006